

What is claimed is:

1 1. A system for upgrading a device driver of a computer through a network, comprising:
2 an upgrade server dividing at least one device driver to be upgraded into a variable file and
3 an invariable file information according to an upgrade version, and supplying said variable file and
4 said invariable file information through said network; and

5 a computer including an upgrading program installed, said computer downloading said
6 variable file and said invariable file information from said upgrade server and upgrading said device
7 driver with said variable file based on said invariable file information.

2. The system according to claim 1, with said upgrading program including a communication
module connecting with said upgrade server and downloading said variable file and said invariable
file information.

3. The system according to claim 2, with said computer further including a backup storage
unit storing said variable file and said invariable file information downloaded, for backup.

1 4. The system according to claim 1, with said device driver selected from the group
2 consisting of a sound driver, a mouse driver, a graphics driver, a local area network card driver, and
3 small computer system interface driver.

1 5. The system according to claim 1, with said computer further comprising a backup copy
2 of said variable file and a backup copy of said invariable file information of said device driver.

1 6. The system according to claim 5, with said backup copy of said variable file and
2 invariable file information accommodating a correction of an error in said device driver in said
3 computer.

1 7. The system according to claim 5, with said backup copy of said variable file and
2 invariable file information being stored in a backup storage unit of said computer to recover said
3 device driver with said variable file according to said invariable file information when the error
4 occurs.

1 8. The system according to claim 1, with said upgrade server further comprising a control
2 unit comparing information on said device driver on said computer with said variable file and said
3 invariable file information on said upgrade server to determine whether said device driver will be
4 updated with said variable file according to said invariable file information.

1 9. The system according to claim 1, further comprising a control unit controlling said
2 variable file and invariable file information to permit said computer to download said variable file
3 and invariable file information for upgrading in response to a download request from said computer.

1 10. The system according to claim 9, with said control unit receiving information on said
2 device driver stored in said computer and comparing said device driver stored in said computer with
3 information on said variable file and invariable file to permit said computer to download said

variable file and invariable file information from said upgrade server.

11. The system according to claim 9, with said control unit transmitting information of said invariable file and variable file to said computer through electronic mail.

12. A method for upgrading a device driver of a computer through a network, comprising the steps of:

generating a variable file by extracting parts being different between an old version and a new version of said device driver, and an invariable file information by extracting parts being the same between said old version and said new version of said device driver;

storing at least one device driver having said variable file and said invariable file information in an upgrade server;

downloading said variable file and said invariable file information from said upgrade server to said computer; and

upgrading said device driver of said computer to said variable file based on said invariable file information.

13. The method according to claim 12, further comprising the step of transmitting information of a version of said device driver installed in said computer to said upgrade server, said upgrade server providing said device driver of said computer to allow said computer to download said device driver of said upgrade server, said device driver of said computer being an old version compared with said device driver of said upgrade server, based on the version information.

1 14. The method according to claim 12, further comprising the steps of:

2 storing said variable file and said invariable file information in said computer for backup,
3 during said step of downloading said variable file and said invariable file information; and
4 recovering said device driver based on said backup variable file and said backup invariable
5 file information, when an error occurs in said device driver of said computer.

1 15. The method according to claim 12, with said step of generating said variable file and
2 said invariable file information, comprising the steps of:

3 installing said old version of said device driver to a first computer system and then storing
4 a registry and a system file;

5 installing said new version of said device driver to a second computer system and then
6 storing a registry and a system file; and

7 comparing said first computer system having said old version of said device driver with said
8 second computer system having said new version of said device driver in terms of the registry and
9 the system file to store the different parts between the old version and the new version of the device
10 driver in the variable file, and to store the same parts between the old version and the new version
11 of the device driver in the invariable file information.

1 16. The method according to claim 12, further comprising the steps of:

2 supplying information of a version of said device driver installed in said computer to said
3 upgrade server; and

4 providing said computer with a list of said variable file and said invariable file information
5 to said computer when said variable file and said invariable file information being of a newer
6 version than said device driver on said computer.

1 17. The method according to claim 12, further comprising the step of transmitting
2 information of said variable file and said invariable file to said computer according to log-on data
3 to allow the downloading of said variable file and invariable file.

18. The method according to claim 17, with the log-on data being from electronic mail
information.

19. A method, comprising the steps of:

generating a variable file by extracting parts being different between an old version and a
new version of a device driver, and an invariable file information by extracting parts being the same
between said old version and said new version of said device driver;

storing said variable file and said invariable file information;

downloading said variable file and said invariable file information to said computer from
storage; and

upgrading said device driver of said computer to said variable file based on said invariable
file information.

20. The method according to claim 19, further comprising the step of comparing the version

of said device driver installed in said computer with said variable file and said invariable file information to allow said computer to download said variable file and said invariable file.

21. The method according to claim 19, further comprising the steps of:

storing said variable file and said invariable file information in said computer for backup, during said step of downloading said variable file and said invariable file information; and recovering said device driver according to said backup variable file and said backup invariable file information, when an error occurs in said device driver of said computer.

22. The method according to claim 19, with said step of generating said variable file and the invariable file information, comprising the steps of:

installing said old version of said device driver to a first computer system and then storing information of an operating system of said first computer;

installing said new version of said device driver to a second computer system and then storing information of an operating system of said second computer; and

comparing said stored information of the operating systems of said first computer system and said second computer system to generate said variable file and said invariable file information.